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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PHAM, BRENDA H

ART UNIT

PAPER NUMBER

2416

MAIL DATE

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11/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/748,746	Applicant(s) BABA, TSUTOMU	
	Examiner BRENDA PHAM	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,7,8,13,15,16,18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 5,7,8,13,15,16,18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 5, 7-8, 13, 15-16, 18, 20 are pending in the application.

Response to Arguments

2. Applicant's arguments filed 07/24/08 have been fully considered but they are not persuasive. Applicant argued in Remark, page 7 of 9, that "Nishihara discloses a layer frame 1 including a header having a packet length identifier and frame mode identifier. The frame mode can be a single frame, a beginning of message (BOM) frame, a continuation of message (COM) frame or an end of message (EOM) frame. However, there is no disclosure or suggestion that transmission data larger than the size of the packet is divided according to the predetermined size of the packet. Instead, Nishihara merely teaches layer 1 frames partitioned into layer 2 frames based on placement and transmission priority (col. 11, lines 58-67).

Examiner respectfully disagrees because Nishihara indeed teaches this arguable claimed feature. Nishihara teaches (**"In accordance with a 28th aspect of the present invention, in the 26th aspect, if the length B of the layer 1 frame containing the best effort IP packet is longer than the best effort IP transfer space length L, a BOM (Beginning Of Message) frame of the length L is constructed by use of the front part of the layer 1 frame containing the best effort IP packet, the BOM frame is transmitted, and an EOM (End OF Message) frame including the remaining segment of the layer 1 frame containing the best effort IP packet is stored. In accordance with a 29th aspect of the present invention, in the 28th aspect, if the length M of the stored EOM frame is longer than the best effort IP transfer space**

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length L, a COM (Continuation of Message) frame of the length L is constructed by use of the front part of the stored EOM frame, the COM frame is transmitted, and an EOM frame including the remaining segment of the stored EOM frame is stored." col. 5, lines 10-35)

Examiner believes Nishihara indeed discloses the argued claimed feature. Nishihara in view of AAPA discloses and render obvious all the claimed limitations in claims 5, 7-8, 13, 15-16, 18 and 20. Therefore, the rejection stands.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 7-8, 13, 15-16, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishihara (US 7,050,455) in view of Applicant's Admitted Prior Art (AAPA).

With respect to independent claims 5 and 13, Nishihara discloses a universal serial bus (USB) communication method comprising:

determining in advance a communication data format between a host computer and a devices (**FIG. 5D shows communication data format in advance according to protocol, IPv4, IPv6, STM, ATM, OAM, etc.)** so that a packet formed by a communication data format comprises a report ID that indicates a presence or an

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absence of a succeeding packet and transmission data (**"FIG. 5B shows a frame mode indicates whether there is a presence or an absence of a succeeding packet, (BOM, COM or EOM), also see FIG. 9);**

setting in advance the packet comprised of the report ID and the transmission data to be a predetermined size (**FIG. 2 showing a basis frame format of the layer 1 frame...the layer 1 frame includes the layer 1 frame header (6 byte) and the layer 1 frame payload (0-64Kbytes);**

setting in advance the report ID as either an ID code "presence" that indicates the presence of the succeeding packet or an ID code "absence" that indicates the absence of the succeeding packet (**"FIG. 6 shows "Frame Mode" in layer 1 header, ID code such as "10" indicates the presence of the succeeding packet and ID code "01" indicates the absence of the succeeding packet);**

at the time of transmission, when the transmission data is larger than the predetermined size of the packet, dividing the transmission data according to the predetermined size of the packet (**"In accordance with a 28th aspect of the present invention, in the 26th aspect, if the length B of the layer 1 frame containing the best effort IP packet is longer than the best effort IP transfer space length L, a BOM (Beginning Of Message) frame of the length L is constructed by use of the front part of the layer 1 frame containing the best effort IP packet, the BOM frame is transmitted, and an EOM (End OF Message) frame including the remaining segment of the layer 1 frame containing the best effort IP packet is stored." col. 5, lines 10-35)**

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when the succeeding packet is present, adding the ID code “presence” to the transmission data at a head portion of the packet, and including a last portion of the transmission data in the packet **(see FIG. 5, header includes Frame Mode, also see FIG. 8A, 8B and 8C);**

transmitting the packet with the report ID.

Although Nishihara does not disclose a universal serial bus (USB) communication line for a human interface device (HID) specification which connects the host computer and the device driver, such communication system is well known in the art and is disclosed in Applicant's Admitted Prior Art.

AAPA discloses a Human Interface Device “HID” and a computer system provided with a USB communication line for the HID specification. AAPA teaches “The HID specification and the HID devices are conventionally known. When communicating based on the USB-HID specification, one byte at the head of a report used in a communication is used as a “report ID”.

Nishihara's teaching provides a frame construction method which can accommodate STM, ATM and IP by use of the same frame format and which can transfer a mixture of STM traffic and best effort traffic by use of the same frame format.

Therefore, it would have been obvious to those having ordinary skill in the art at the time of the invention was made to implement Nishihara teaching in the system of AAPA which can reduce system complexity by allows the transfer a mixture of STM traffic and best effort traffic in the same frame format.

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With respect to claims 7 and 15, Nishihara further discloses filling a remaining blank portion with dummy data in the packet having the ID code "absence"; and transmitting the packet having a data length of the predetermined size (**"if the length M of the stored EOM frame is shorter than the best effort IP transfer space length L and if the EOM frame length M and a minimal dummy frame length D added together (M+D) is equal to the best effort IP transfer space length L, the stored EOM frame is transmitted as an EOM frame and thereafter a minimal dummy frame is transmitted."**) col. 17, lines 33-36

With respect to claims 8 and 16, Nishihara in view of AAPA discloses wherein the device driver is a card reader (AAPA, page 1) and, when the packet is transmitted from the card reader to the host computer, the ID code is added to the packet based on the presence or the absence of the succeeding packet at the head portion of the packet to be transmitted, the packet is transmitted with the ID code (**see Abstract**).

With respect to claims 18 and 20, Nishihara further teaches wherein the size of the packet is determined as a number of bytes that is less than a size of the transmission data, a first byte is assigned for the report ID, and the remaining bytes are assigned for a part of the transmission data (**"the length of the variable-length layer 1 frame payload is set between 0Kbyte to 64 Kbytes, See also FIG. 7)**

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

October 28, 2008

/Brenda Pham/

Primary Examiner, Art Unit 2416